Spec No. 203 Rev. A

Date 2/4/64

Specification for Roller Transport Processor (12-Inch)

Mission: Build a versatile, self-threading photographic processor capable of processing both sheets and continuous strips of film to either standard negative or reversal images. Changes from one process to the other accomplished with a minimum of operator effort.

Processing Method: Roller transport conveyance through deep tanks. Agitation accomplished by action of the conveying rollers.

Material Capabilities: Film Size

Cut Sheet - Minimum - 4 x 5 inches

Maximum - 11 x 14 inches

Note: Cut sheet films must be packaged and shipped in cut sheet form not cut from roll stock.

Continuous Strip:

Minimum - 16mm

Maximum 9½" x 1000 ft.

Material: Certain types of black and white aerial and commercial films.

Note: It should be recognized that with roller transport equipment, some of the thinner base materials may

require a pilot tab at the leading edge in order to be self-threading.

Output Rates: (Approximate)

Print Material

Negative	15 ft/min
Reversal	10 ft/min

Original Material

Negative	8 ft/min
Reversal	5 ft/min

Process Time:

Dry to Dry:

Negative	5 min
Reversal	7 min

Original Material

Negative	9 min
Reversal	14 min

Product Quality:

Negative: Archieved (indefinite keeping)

Reversal: Good commercial quality (approximately 5 years)

Process Temperature: 70°F to 110°F

Reversal Capability: Equipment to be capable of reversal image exposure by both chemical fogging and/or white light flashing.

Operation: Daylight operating capability for all continuous strip material up to capacity of A-9 magazine work room feed for all cut sheet material.

Physical Dimensions: No change.

Service Requirements: No change.

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DESIGN OBJECTIVE

Roller Transport Reversal Processor (12-inch)

(PAR-214)

Problem

A requirement exists for a versatile photographic processor capable of handling both sheets and continuous webs of photographic material and adaptable to processor yielding either standard negative or reversal images. Interchange between processes should be easily made.

Proposal

It is proposed to use elements of existing self-threading equipment in a new configuration to incorporate a reversal processing cycle and the necessary valves, switches and controls for easy interchange between cycles.

The characteristics of the proposed processor are concerned in the attached Spec No. 203, which includes a typical layout for such a machine.

It should be recognized that as with other RT Processors some of the thinner base materials may require a pilot tab at the leading edge in order to be self-threading.

Spec No. 203

Specification for Roller Transport Reversal Processor (12-inch)

Mission: Build a versatile, self-threading photographic processor capable of processing both sheets and continuous strips of film to either standard negative or reversal images. Changes from one process to the other accomplished with a minimum of operator effort.

Processing Method: Roller transport conveyance through deep tanks. Agitation accomplished by action of conveying rollers.

Material Capabilities:

Cut Sheet:

Minimum - 4 x 5 inches

Maximum - 11 x 14 inches

Note: Cut sheet films must be packaged and shipped in cut sheet form. Not cut from roll stock.

Continuous Strip:

Minimum - 16mm

Maximum - 9½-inches

Material: Certain types of black and white aerial and commercial films. Black and white treated paper base materials.

Note: It should be recognized that with roller transport equipment, some of the thinner base materials may require a pilot tab at the leading edge in order to be self-threading.

Output Rates: (Approximate)

Print Material

Negative	15 Ft/min.
Reversal	10 Ft/min.

Original Material

Negative	8 Ft/min.
Reversal	5 Ft/min.

Process Time: Dry to Dry: (Approximate)

Print Material

Negative	5 minutes
Reversal	7 minutes

Original Material

Negative	9 minutes
Reversal	14 minutes

Product Quality: Good commercial quality.

Physical Dimensions: Overall Dimensions: (Approximate)

Length - 13 ft. 6 inches

Width - 40 inches

Height - 45 inches

Weight - 2,000 pounds (approximate)

Service Requirements:

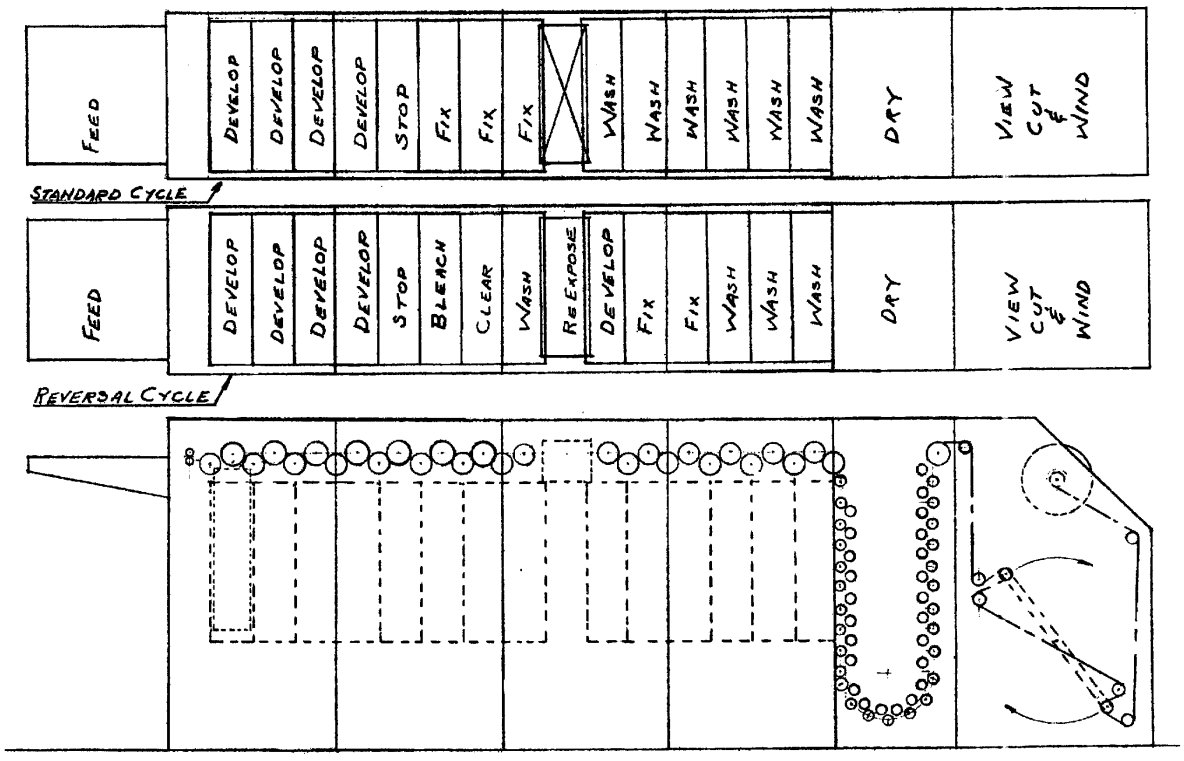
Power: 120/208 volt, 3 phase, 4 wire 60 cycle a. c. can be converted to 230 volt, 3 phase, 3 wire or 230 volt single phase, 3 wire, 12 to 15 kilowatts.

Water: Hot (150°F) and cold (60°F Max.) service to operating area at 45 psi minimum.

Total consumption 6 to 8 gallons per minute controlled to $\pm\frac{1}{2}$°F. Mixing and control equipment provided with processor.

Air: 25 psi instrument air.

Sewer: 4-inch Duriron service line.



SPEC No 203

FIG. - 1

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